

Claim Amendments

1. (canceled) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into N data bursts, said system comprising:

means for defining a channel as a series of bursts that occur periodically every N bursts once per frame;

means for defining a sub-channel as every Mth burst of said channel; and

means for transmitting said channel and sub-channel from a first station to a second station.

2. (canceled) The system of claim 1, wherein channels of different rates are realized by using multiple sub-channels of rate $1/M$.

3. (canceled) The system of claim 2, wherein 0246/1357 interleaving is used.

4. (currently amended) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into data bursts, said system comprising:

means for defining a channel as a series of bursts that occur periodically every N bursts once per frame, where N is a positive integer;

means for transmitting digital information over said channel from a first station to a second station. The system of claim 2, wherein 0246/1357 interleaving is used with non-ideal frequency hopping transmitting because of the improved link performance provided thereby.

5. (currently amended) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into data bursts, said system comprising:

✓ means for defining a channel as a series of bursts that occur periodically every N bursts once per frame, where N is a positive integer;

means for transmitting digital information over said channel from a first station to a second station. The system of claim 2, wherein 0246/1357 interleaving is used because of a lower delay to the start of a talkspurt than 0123/4567 interleaving.

6. (currently amended) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into data bursts, said system comprising:

✓ means for defining a channel as a series of bursts that occur periodically every N bursts once per frame, where N is a positive integer;

means for transmitting digital information over said channel from a first station to a second station. The system of claim 2, wherein 0246/1357 interleaving is used because of larger resource pools for statistical multiplexing under half duplex constraints imposed by mobile stations provided relative to 0123/4567 interleaving.

7.(canceled) The system of claim 1, wherein 0246/1357 interleaving is used.

8. (canceled) The system of claim 1, wherein 0246/1357 interleaving is used with non-ideal frequency hopping transmitting because of the improved link performance provided thereby.

9. (canceled) The system of claim 1, wherein 0246/1357 interleaving is used because of a lower delay to the start of a talkspurt than 0123/4567 interleaving.

10. (canceled) The system of claim 1, wherein 0246/1357 interleaving is used because of larger resource pools for statistical multiplexing under half duplex constraints imposed by mobile

stations provided relative to 0123/4567 interleaving.

11. (canceled) A system for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into N data bursts, said system comprising:

a first multiplexer defining a channel as a series of bursts that occur periodically every N bursts once per frame;

a second multiplexer defining a sub-channel as every Mth burst of said channel; and

a transmitter transmitting said channel and sub-channel from a first station to a second station.

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12. (currently amended) A method for communicating using wireless time division multiplexed communications in which time is divided into a plurality of frames and each frame is divided into N data bursts where N is a positive integer, said method comprising the steps of:

interleaving bursts using a 0246/1357 interleaving sequence; and

transmitting the interleaved bursts from a first station to a second station.

13. (originally presented) A method as set forth in claim 12 wherein said transmitting the interleaved bursts from a first station to a second station step further includes using non-ideal frequency hopping during the transmitting.

14. (new) The method of claim 12 further comprising:
utilizing one of even and odd numbered frames as a first channel;
utilizing the other of the even and odd numbered frames as a second channel;
disposing first and second control frames in the one and other of the even and odd numbered frames, respectively, so that a first station receiving the wireless time division multiplexed communications over the first channel need only decode the one of the even and odd numbered frames and a second station receiving the wireless time division multiplexed communications over the second channel need only decode the other of the even and odd numbered frames, thereby eliminating a need for a station to decode both even and odd numbered frames.
